



# NC Lagoon Conversion and Methane Capture Program Updates

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# Lagoon Conversion Program

- Purpose: Convert anaerobic lagoon & sprayfields to innovative systems
- \$2,000,000 initial allocation.
- NC Agriculture Cost-Share Program
- Round 1: 90% cost-share up to \$500,000
- Technology neutral



# Innovative Technology Performance Standards

- Surface and groundwater discharges
- Ammonia emissions
- Odor
- Disease vectors and pathogens
- Nutrient and heavy metal contamination
- EMC to adopt rules.

# Round 1 applications

	Requested	Match	Total Cost
1. Centralized - Sampson	\$ 500,000	\$ 75,000	\$ 575,000
2. Farm - Sampson	\$ 500,000	\$ 56,000	\$ 556,000
3. Farm - Sampson	\$ 500,000	\$ 56,000	\$ 556,000
4. Farm - Pitt	\$ 432,216	\$ 48,024	\$ 480,240
5. Farm - Wilson	\$ 500,000	\$ 175,865	\$ 675,865
6. Centralized - Greene	\$ 475,877	\$ 52,876	\$ 528,753
7. Farm - Greene	\$ 475,877	\$ 52,876	\$ 528,753
Totals	\$ 3,383,970	\$ 516,641	\$ 3,900,611



# Round 1 LCP Allocations

	Requested	Match	Total Cost
1. Super Soils Systems USA, Inc. centralized composting system (Sampson Co.)	\$ 500,000	\$ 75,000	\$ 575,000
2. Sampson Co. (5880 head Finisher)	\$ 500,000	\$ 56,000	\$ 556,000
3. Sampson Co. (5880 head Finisher)	\$ 500,000	\$ 56,000	\$ 556,000
Totals	\$ 1,500,000	\$ 187,000	\$ 1,687,000

# Program Challenges

- Present economic climate
- Waste operator certification requirements
- Performance standards
- Use of existing lagoon as a back-up system



# Existing Lagoon Guidance



- Dual permit  
(innovative + existing NPDES/State)
- Maintain both systems  
(lagoon, receiving fields & crops and waste application systems)
- Storage component  
(final effluent only)
- Treatment component  
(earthen structure = synthetic liner)
- 10 year maintenance

# Next steps...

- Announce Round 1b
- January 1, 2009 – DWQ issues permit; construction begins
- Fall, 2009 – system online





# The Swine Farm Methane Capture Pilot Program

- Administered jointly by the NC Utilities Commission and DENR (Division of Soil & Water Conservation)
- Voluntary - up to 50 registered farms
- Full/partial covered lagoons to generate electricity
- Max. 25 MW of electricity
- Purchase by Electric Public Utility  
(i.e. Progress, Duke, Dominion)

# Incentives



- 7 year agreement
- Max. price of 18¢/kWh
- Recovery of capital and operating costs
- Actual price determined by negotiation

# Timeline

- March 10 – Registration Opens
- August 7 – NCUC publishes suggested purchase price.
- August 29 – eligibility letters mailed
- Participants notify DENR of agreement
- Power available on or before  
September 1, 2010

# Methane Capture Pilot Program Registry



- 218 farms registered
- 185 Murphy-Brown & Murphy Family Venture company farms
- 33 Contract Growers
- 170 Serviced by EMC



# Questions?

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